

WHAT IS CLAIMED IS:

1. A sheet feed device comprising a door for supporting one of the rollers of a feed roller pair for feeding a sheet, mounted on a one end side of the apparatus main body so as to be opened or closed such that the one roller is pressured against the other roller of the feed roller pair provided in the apparatus main body at the time the door is closed, comprising:

an outer door supported rotatably on the one end side of the apparatus main body ;

an inner door for supporting one of the rollers of the feed roller pair, supported rotatably with respect to the outer door;

wherein the one roller of the feed roller pair is separated from the other roller at the beginning of opening the outer door, and thereafter the inner door is rotated while maintaining a constant angle with respect to the outer door in connection with the rotation of the outer door.

2. The sheet feed device according to claim 1, wherein the one roller is separated from the other roller by substantial parallel movement at the beginning of opening the outer door.

3. The sheet feed device according to claim 1, wherein a lock mechanism for holding the outer door and inner door by a certain angle or releasing the hold of the outer door and inner door .

4. The sheet feed device according to claim 1, wherein the constant angle formed by the outer door and the inner door while the rotation of the outer door is same as or larger than the angle formed between the straight line passing through the rotation axis center of the outer door and the rotation axis center of the inner door and the straight line from the rotation axis center of the outer door perpendicular to the outer door.

5. The sheet feed device according to claim 1, wherein the feed roller

pair is a transfer inner roller and a transfer outer roller of a secondary transfer part for transferring toner images transferred and superimposed successively on an intermediate transfer member collectively onto a sheet.

6. The sheet feed device according to claim 1, wherein the feed roller pair is an image bearing member and a transfer roller for transferring toner images formed on the image bearing member.

7. The sheet feed device according to claim 1, wherein the feed roller pair is a roller pair to be rotated and driven by engaging gears provided on each roller end part and transmitting the driving force to the gears.

8. The sheet feed device according to claim 1, wherein the gap between the outer door and the inner door provides a feeding path for guiding a sheet.

9. The sheet feed device according to claim 1, wherein the inner door comprises a first feed part for feeding a sheet with respect to the apparatus main body, and a second feed part for feeding a sheet with respect to the outer door.

10. The sheet feed device according to claim 9, wherein the first feed part is positioned by a positioning part on the apparatus main body side, and the second feed part is positioned by a positioning part of the outer door.

11. An image forming apparatus for forming an image on a sheet, comprising the sheet feed device according to any of claims 1 to 10 , and image forming portion for forming an image on the sheet fed by said sheet feeding device.